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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,864	07/14/2003	Vaughn L. Mower	400.0001.U1(US)	7764

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EXAMINER
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ZEWDU, MELESS NMN

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/619,864

Applicant(s)

MOWER ET AL.

Examiner

Meless N. Zewdu

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,9,12-14,16-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 4-8,10,11,15 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/14/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

1. This action is the first on the merit of the instant application.
2. Claims 1-20 are pending in this action.

### *Drawings*

The drawings are objected to because they **lack formality and clarity**.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

Claims 1-3, 9, 12-14, 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable Zscheile et al. (Zscheile) (US 6,847,619 B2) in view of Nelson et al. (Nelson) (US 2001/0036200 A1).

**As per claim 1:** while the preamble is considered as an intended use for lack of enhancing the body of the claim, Zscheile discloses:

a Hub for generating a HUB TDMA epoch (see abstract, lines 1-10), wherein the Hub TDMA epoch comprises at least one priority message slot comprising at least one priority message sub-slot (see abstract (see abstract, lines 10-17; col. 4, lines 44-55); and

at least one SPOKE, wherein the at least one SPOKE is adapted to transmit a priority message during the at least one priority message sub-slot within the HUB TDMA epoch (see col. 4, lines 44-55; col. 5, lines 1-30). But, Zscheile does not explicitly teach about a symbol length of a message adapted to coincide with the PN code, as claimed by applicant. However, in the same field of endeavor, Nelson teaches about a wireless communication network wherein, each short PN code corresponds to a predefined message that is potentially transmitted in a reverse link time slot to a base station/HUB (see paragraph 0094). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Zscheile with that of Nelson for the advantage of a field unit (analogically a SPOKE) to request message so as to remain in a standby mode or to be placed in an active mode (see paragraph 0094).

**As per claim 9:** the features of claim 9 are similar to the features of claim 1, except claim 9 is directed to a HUB PN Epoch waveform, which is intended to serve as a communication medium for the system of claim 1. However, since the system is obviated by the prior art of references, the wave form of claim 9 also should be obvious. Hence, claim 9 is rejected on the same ground and motivation as claim 1.

**As per claim 12:** the features of claim 12 are similar to the features of claim 1. Regarding, the difference feature, "dividing the PM time slot into a plurality of PM subdivisions", it reads on the prior art's ('619) slots (see abstract). Hence, claim 12 is rejected on the same ground and motivation as claim 1.

**As per claim 16:** the features of claim 16 are similar to the features of claims 1 and 12. Hence, claim 16 is rejected on the same ground and motivation as claims 1 and 12.

**As per claim 20:** claim 20 is directed to a computer program readable storage comprising instructions for performing the steps of method claim 12 in the system of claim 1. But, since, the system and method step are obviated by the combined prior art references, as discussed above, the program storage of claim 20, with its machine readable instructions, should also be obvious. Hence, claim 20 is rejected on the same ground and motivation as claims 1 and 12.

**As per claim 2:** Zscheile teaches a system, wherein the HUB further comprises:

at least one HUB/base station PN code generator for generating HUB PN codes (see paragraphs 0024, 0063). The generator should be obvious from the generated PN codes. Rake receiver is a standard receiver when diversity receive in a base station (HUB).

**As per claim 3:** it is typical of a rake receiver having parallel correlators, would have been obvious to use same in a HUB or base station.

**As per claim 13:** Zscheile teaches a method, further comprising:

receiving a SPOKE PN encoded priority message during one of the plurality of PM sub divisions (see abstract), wherein the parallel PN correlating is same as provided in the rejection of claim 3.

**As per claim 14:** Nelson teaches a method that comprises minimizing PN phase difference between the received PN encoded message and a PN code generated by the HUB/base station (see paragraphs 0065, 0094). ). Phase difference is a function of time; in other words determining the time enables one to determine the phase.

**As per claim 17:** Zscheile teaches about a method, wherein the TDMA frame comprises a PN epoch frame abstract; col. 6, lines 22-61).

**As per claim 18:** Nelson teaches a method further comprising minimizing PN phase difference between each of the plurality of SPKES and the HUB (see abstract; paragraphs 0065, 0094). Phase difference is a function of time; in other words determining the time enables one to determine the phase.

### ***Allowable Subject Matter***

Claims 4-8, 10, 11, 15 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Banks-Harold Marsha can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2617

Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600

Meless Zewdu

A handwritten signature in cursive script, appearing to read "Zewdu, Meless".

Examiner

07-December 2006.